

Work Order ID 54762

December 21, 2009 9:05:57 AM



Page 1

Item ID: D3121-144

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 12/21/09 Start Qty: 8.00



Cust Item ID:

Required Date: 1/04/10 Req'd Qty: 8.00



Customer:

Reference:

Approvals:

Process Plan:

W

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3121

Rev E

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: (1.250" x 2.000") 4.425" long

M.A 09/12/30

8

0

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS I

Memo

0.00

HAAS CNC vertical machine #1

1-Machine D3121-114 as per Folio FA330 and Dwg D3121-114□2-Deburr□3-Scribe batch number

*09-12-31
A.A 10/01/02*

8

0

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

09-12-31

8

0

Work Order ID 54762

December 21, 2009 9:05:57 AM



Page 2

Item ID: D3121-144

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 12/21/09 Start Qty: 8.00



Cust Item ID:

Required Date: 1/04/10 Req'd Qty: 8.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

*J. M. 01-05**8 7*

140

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

Assemble D3121-143 as per Dwg D3121.

Bio 01/06 *(8)*

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

*278 10/06/06**(78)*

Work Order ID 54762

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Page 3

Item ID: D3121-144

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 12/21/09 Start Qty: 8.00



Cust Item ID:

Required Date: 1/04/10 Req'd Qty: 8.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

Identify as per dwg & Stock Location: 235

0.00



Packaging

Memo

0.00

Packaging

6/14/01/6 (8)

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/01/06
MF 10-01-06

Picklist Print

December 21, 2009 9:05:56 AM

Page 1

Work Order ID: 54762

Parent Item: D3121-144

Parent Item Name: Bracket Assembly

Comments:

Start Date: 12/21/09

Required Date: 1/04/10

Start Qty: 8.00

Required Qty: 8.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3121-241 Manufactured No



Bearing Assembly

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	31	
52592	31	

16.0000



EP 10/01/06

B54770 (16x)

D3121-21 Manufactured No



Bolt

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	43	
46032	5	
50096	10	
52518	28	

43.0000



EP 10/01/06

B54769 (8x)

B54797 (8x)

M174B1.250X02.000 Purchased No



17-4 SS Bar 1.250 x 2.00

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
MAT	25.73894736	
109851	0.73894736	
113437	25	

25.7389



3.0989

2.9666 F+ N.A 09/12/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	54762
Description: Bracket		Part Number:	D3121-114
Inspection Dwg: D3121	Rev: E	Page 1 of 2	

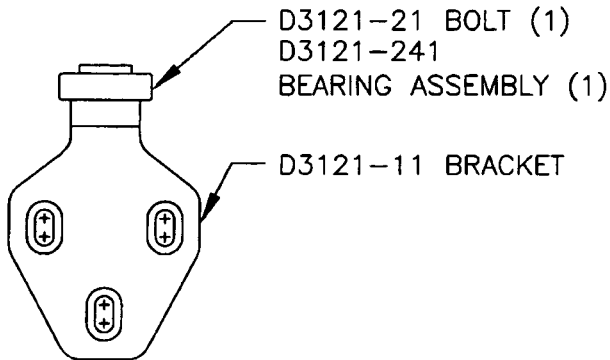
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.080	+/-0.010	.088	/			
0.300	+/-0.010	.305	/			
R0.375	+/-0.010	.375	/			
1.54	+/-0.030	1.54	/			
0.350	+/-0.010	.35	/			
R0.25	+/-0.030	.25	/			
Ø0.392	+0.002/-0.000	.393	/			
Ø0.201	+0.005/-0.000	.202	/			
0.100	+/-0.010	.105	/			
2.540	+/-0.010	2.540	/			
1.590	+/-0.010	1.590	/			
0.160	+/-0.010	.160	/			
0.400	+/-0.010	.400	/			
1.220	+/-0.010	1.220	/			
1.600	+/-0.010	1.600	/			
3.80	+/-0.030	3.80	/			
1.800	+/-0.010	1.807	/			
R0.50	+/-0.030	R.50	/			
0.130	+/-0.010	.130	/			
3.41	+/-0.030	3.41	/			
3.65	+/-0.030	3.65	/			
2.24	+/-0.030	2.24	/			
45°	+/-0.1°	45°	/			
R0.25	+/-0.030	R.25	/			
3.97	+/-0.030	3.97	/			
R0.38	+/-0.030	R.38	/			
Ø0.392	+0.002/-0.000	.393	/			
Ø0.201	+0.005/-0.000	.202	/			
0.268	+/-0.010	.268	/			
R0.260	+/-0.010	R.260	/			
0.080	+/-0.010	.080	/			
0.300	+/-0.010	.300	/			
0.381	+/-0.010	.381	/			
0.201	+/-0.010	.201	/			

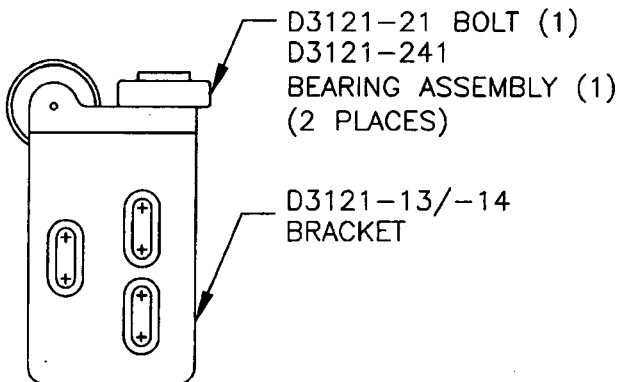
DART**RELEASED**
07.11.07

DESIGN #	DRAWN BY LE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 1 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2
A	02.04.15	NEW ISSUE	
B	03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146	
C	04.02.17	ADD CLEARANCE; USE -241 BEARING	
D	06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000	
E	07.11.07	ADD TOLERANCE TO 0.032 (DETAIL B)	

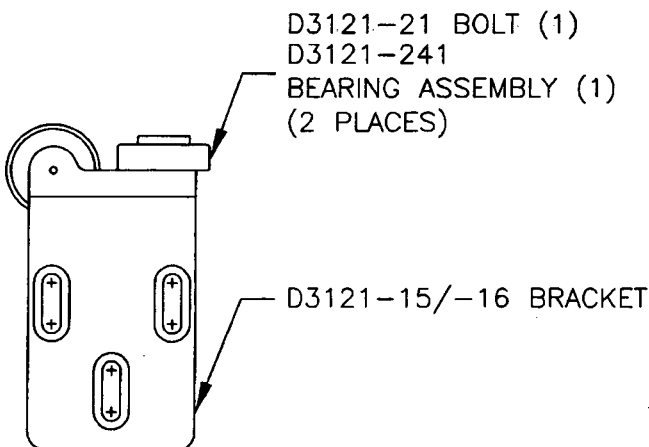


D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)

Wb 54762



**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-37/-38)



**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-35/-36)

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 2 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)

D3121-111 BRACKET

D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

RELEASED
07.11.07

D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-113 / -114 BRACKET

D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-03/-04)

D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-115 / -116
BRACKET

D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-05/-06)

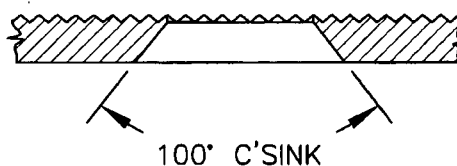
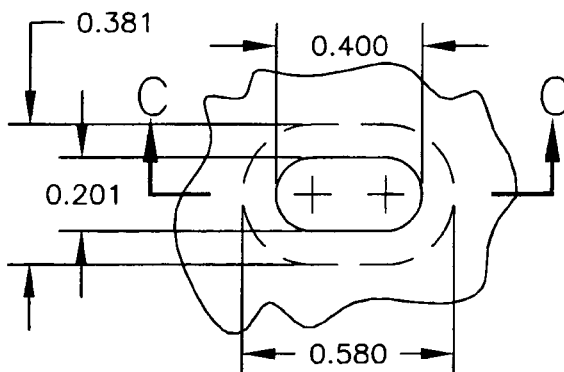
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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 3 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:1

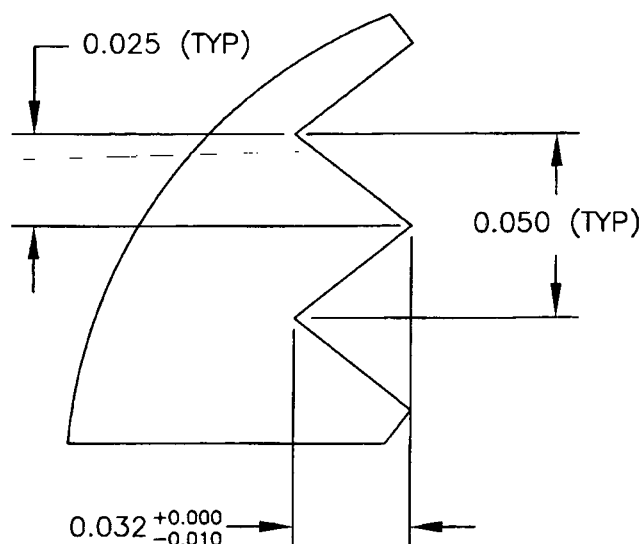
**DETAIL A:
SLOT DETAIL**
SCALE 2:1
VIEW ROTATED



**SECTION
C-C**

RELEASED
07.11.07

**DETAIL B:
RIDGE DETAIL**
PARTIAL SECTION
SCALE 1:20

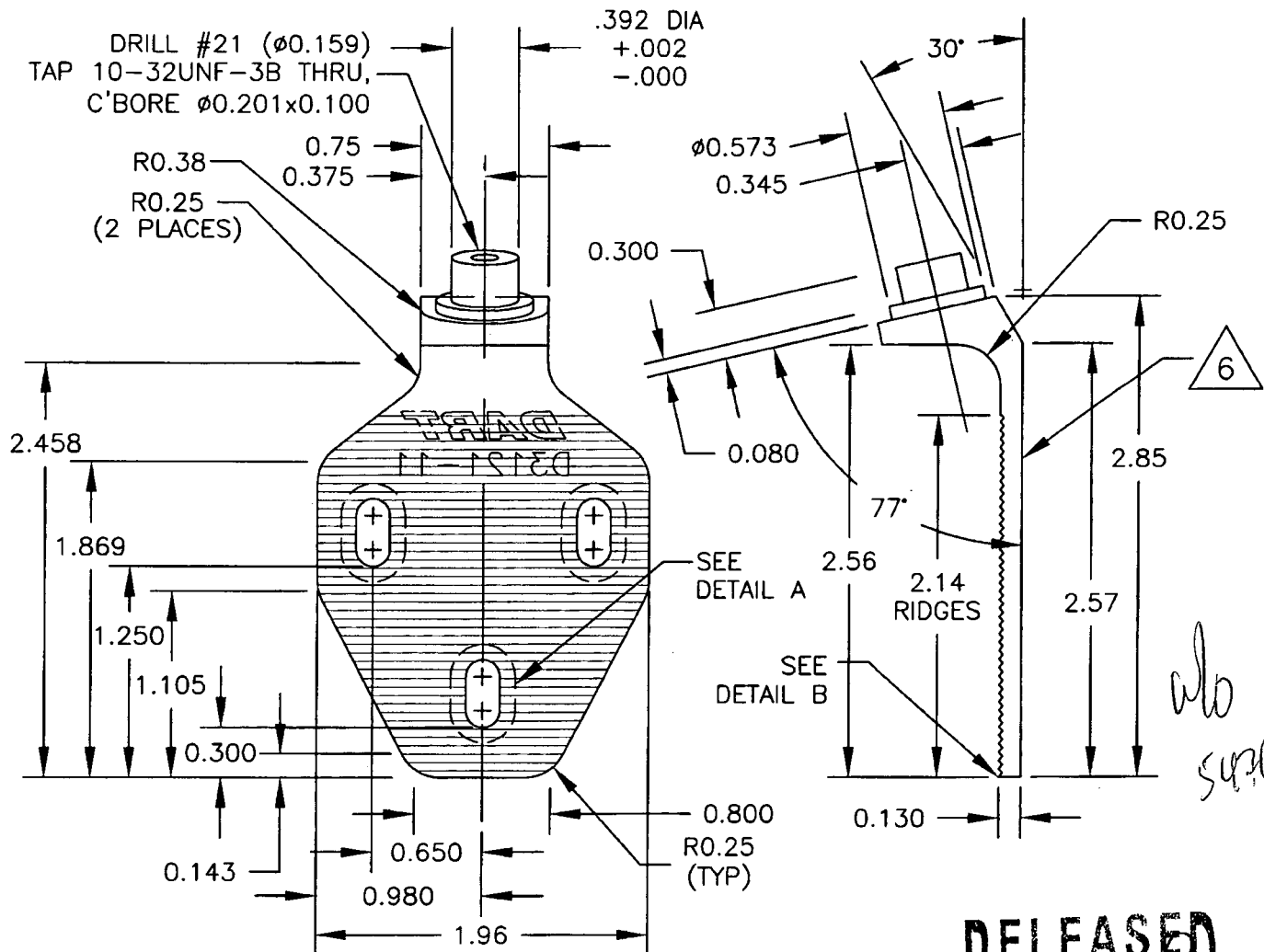


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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 4 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:1

**RELEASED**
07.11.07**D3121-11 BRACKET**

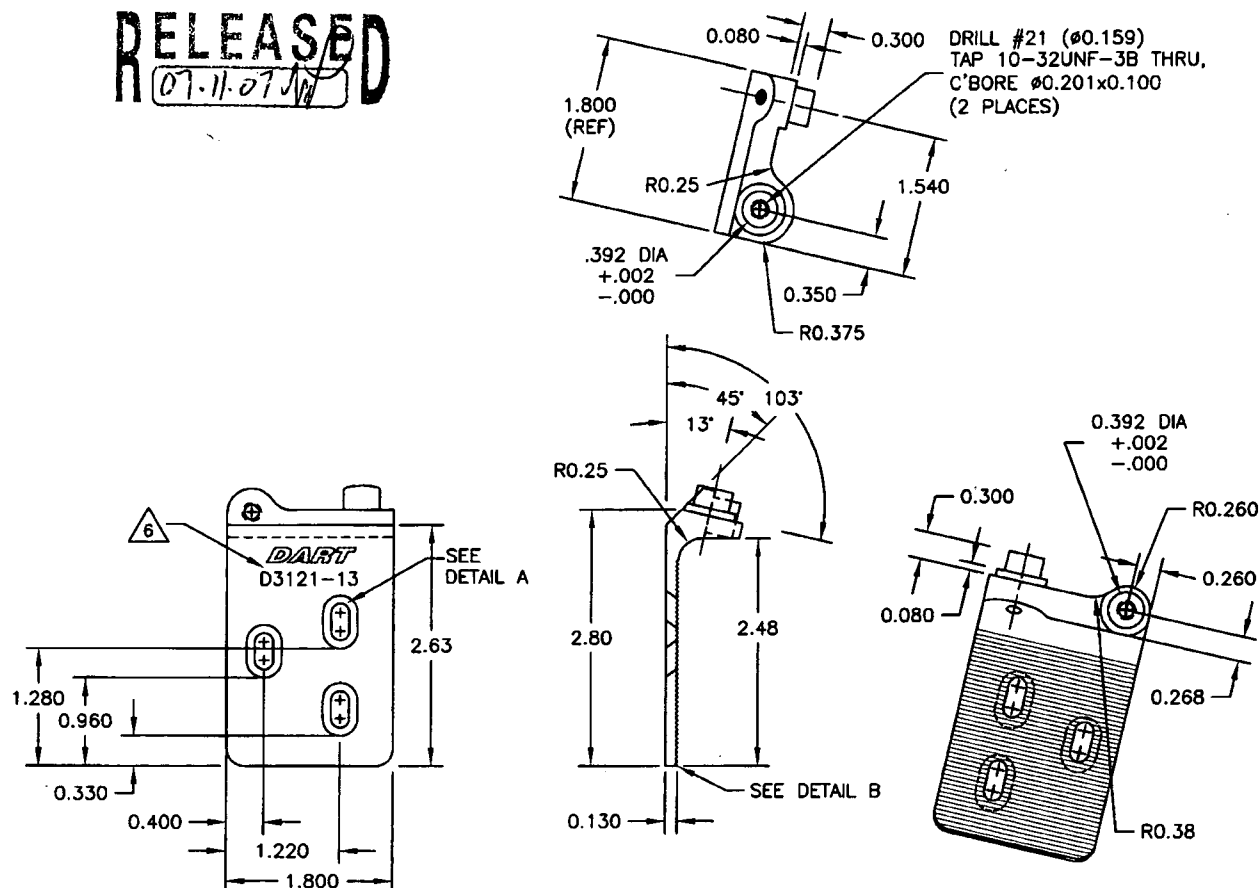
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 5 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07*Wb 54762***D3121-13 BRACKET (SHOWN)****D3121-14 BRACKET (OPPOSITE)**

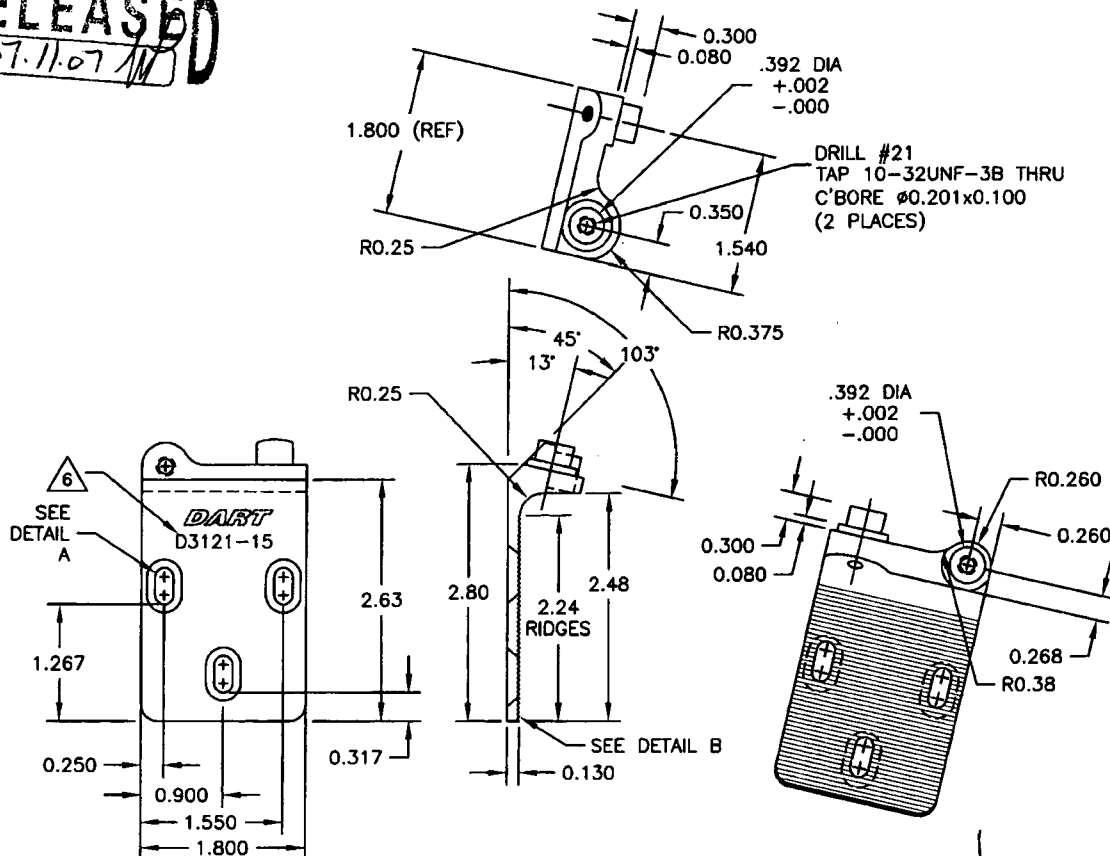
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 6 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07**D3121-15 BRACKET (SHOWN)****D3121-16 BRACKET (OPPOSITE)**

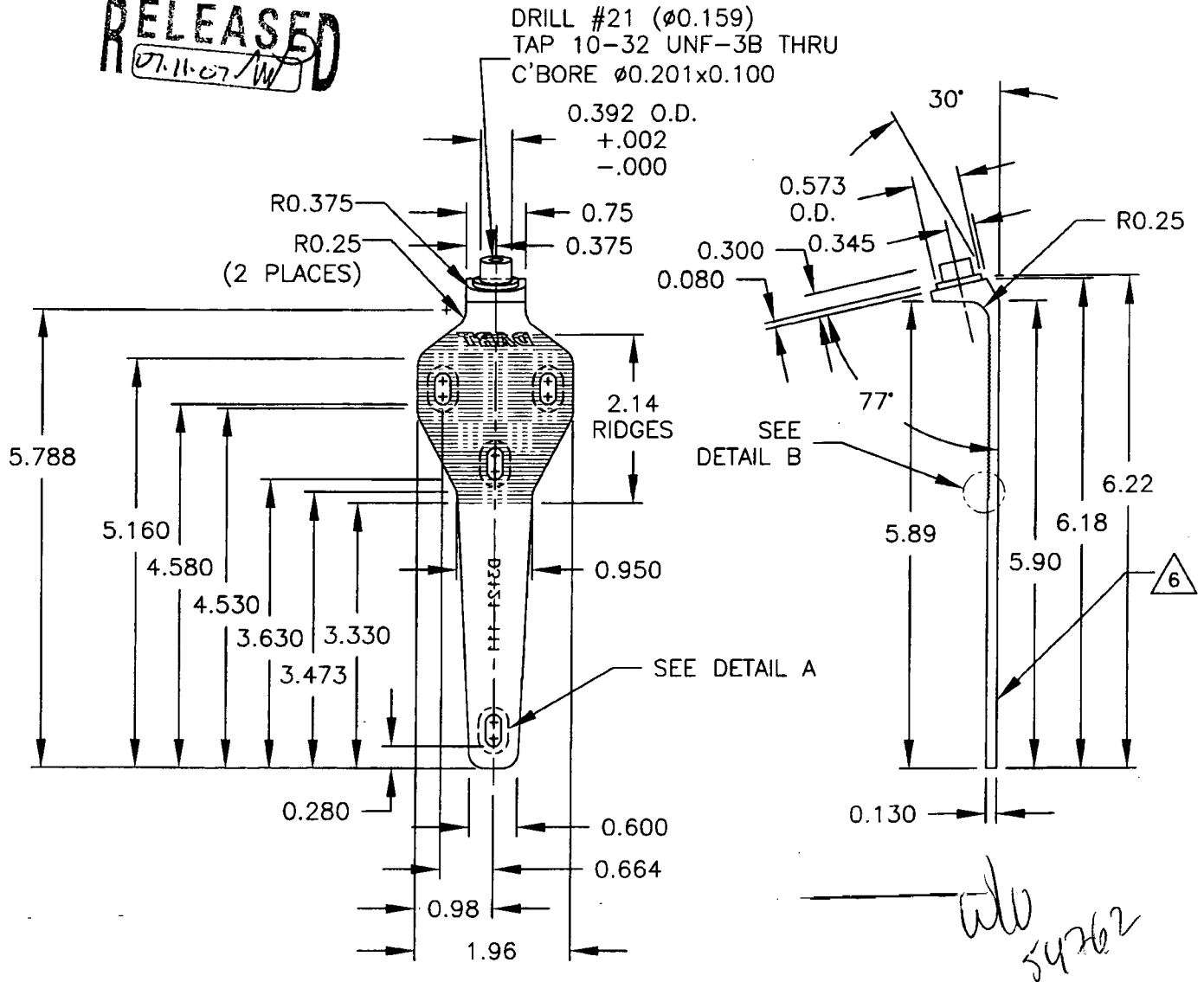
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 7 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07/W**D3121-111 BRACKET**

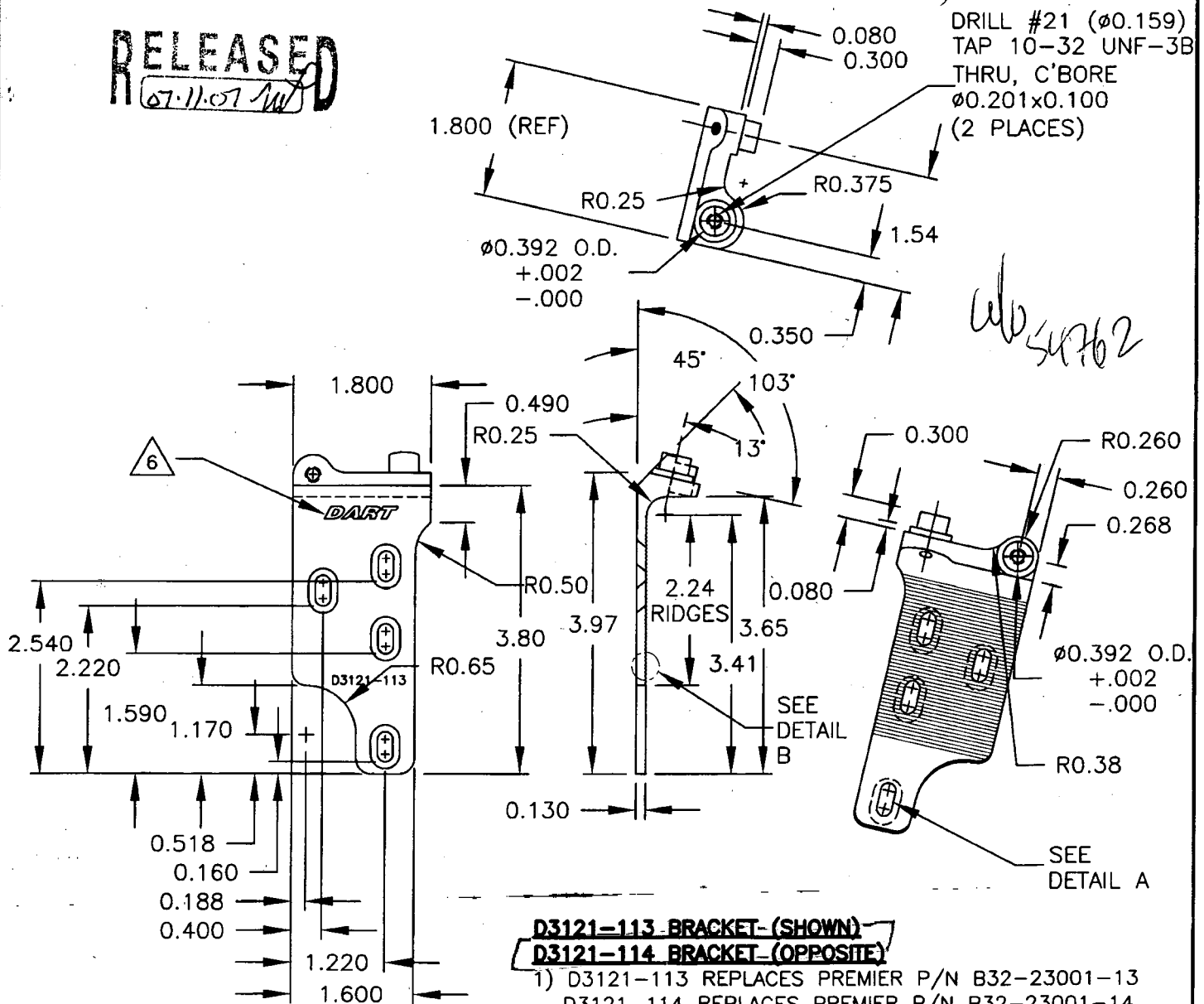
- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 8 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07

D3121-113 BRACKET (SHOWN)
D3121-114 BRACKET (OPPOSITE)

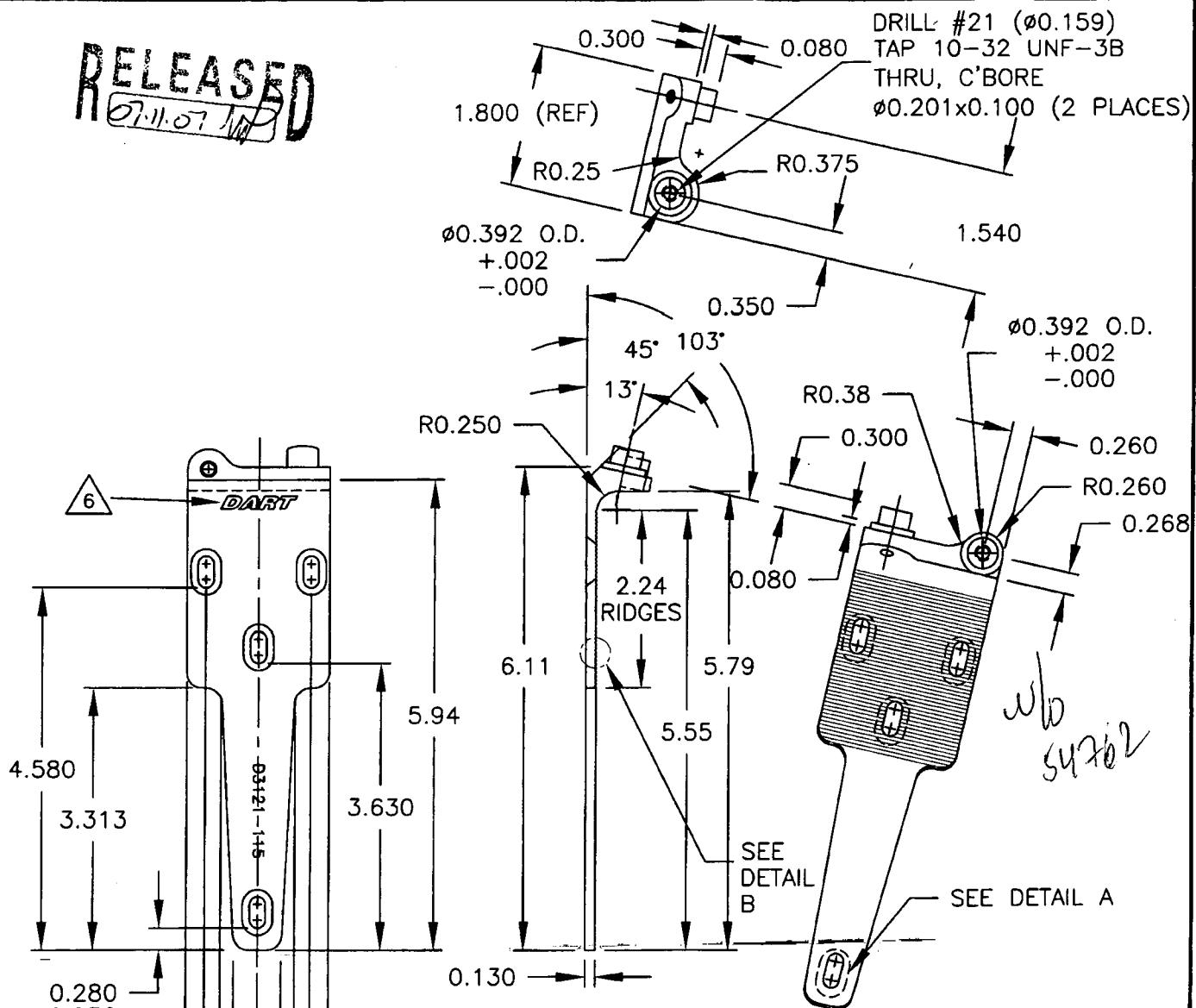
- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 9 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07

D3121-115 BRACKET (SHOWN)
D3121-116 BRACKET (OPPOSITE)

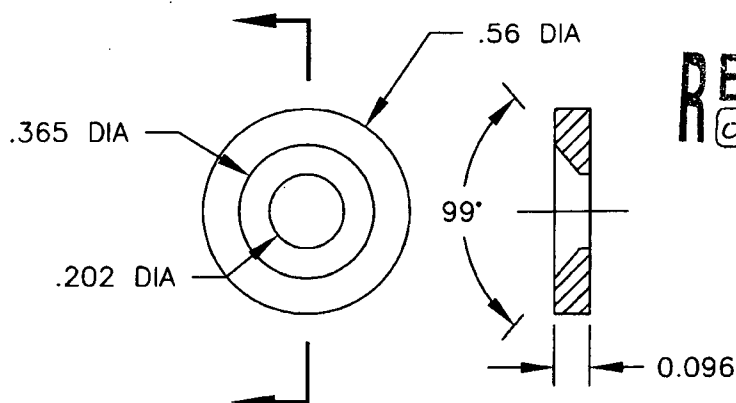
- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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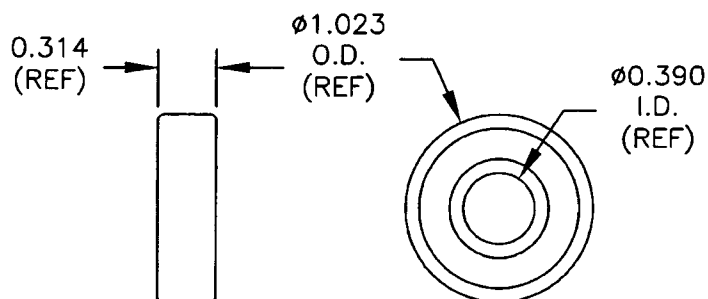
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DART

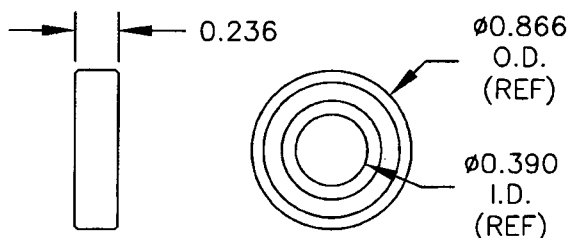
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CHECKED <i>HA</i>	APPROVED <i>HA</i>	DRAWING NO. D3121	REV. E SHEET 10 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:1

**D3121-17 WASHER (SCALE 2:1)**

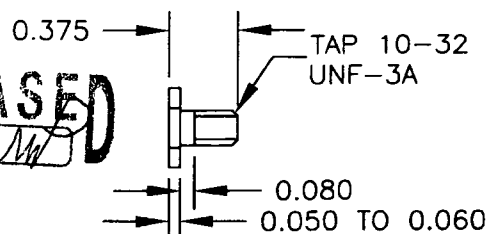
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

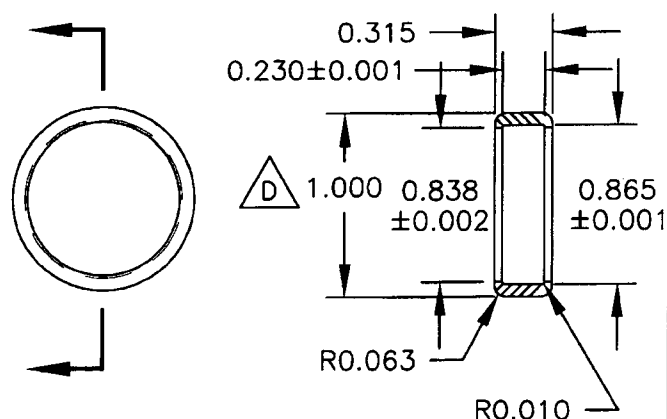
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM - FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

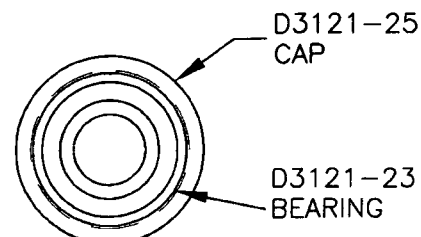
- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, 1.25 (REF DART SPEC. M-DELIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3121-241 BEARING ASSEMBLY (SCALE 1:1)**

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